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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/388,813 09/01/99 STEPHAN

W 21222

000535 MMC2/0725

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EXAMINER

NGUYEN, V

ART UNIT	PAPER NUMBER
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2858

**DATE MAILED:**

07/25/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/388,813	STEPHAN, WALDEMAR
	<b>Examiner</b>	<b>Art Unit</b>
	VINH P NGUYEN	2858

-- Th MAILING DATE of this communication appears on the cover sheet with the correspond nce address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 11 May 2001.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 12-23 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 12-23 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

15)  Notice of References Cited (PTO-892) 18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
16)  Notice of Draftsperson's Patent Drawing Review (PTO-948) 19)  Notice of Informal Patent Application (PTO-152)  
17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9. 20)  Other: \_\_\_\_\_

1. Claims 12-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, it is unclear what is meant by “effecting a regulatory action for said pump as a function of temperature”. It is unclear how the temperature is associated and interrelated with the measuring voltage and a current drawer and the conductor. Furthermore, “said current drawer” has no antecedent basis. Furthermore, it is unclear how “a conductor” is interrelated and associated with the power line and the motor control circuit and what “a conductor” represents. Is it shown in any of drawings? In claim 13, it is unclear what “a conductor” represents. Is it shown in any of drawings? Furthermore, it is also unclear how the conductor is interrelated and associated with the power line and the motor control circuit. In claim 17, it is unclear what is meant by “effects a regulating action in response to a temperature of said portion of said conductor” and what apparatus or device is regulated by the computer unit. In claim 18, it is unclear what “a conductor” represents. Is it show in any of drawings? Furthermore, it is also unclear how the conductor is interrelated and associated with the power line and the motor control circuit.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12-16 and 18-22 (insofar as understood) are rejected under 35 U.S.C. 103(a) as being unpatentable over Whipple,III (Pat # 5,319,304).

As to claims 12-13,16 and 18, Whipple III discloses a load measuring device (10) as shown in figures # 1 and 11 having a motor (75) driving a pump (70), control circuit (201) and a device (10) for monitoring machine load. It is noted that the device (10) has both current and voltage sensors, therefore it would have been well known for one of ordinary skill in the art to measure a voltage drop across a portion of conductor (conductor positioned between the load and the power source). Furthermore, with a known voltage drop, one of ordinary skill in the art would be able to calculate a current draw from that voltage drop by using Ohm's law. ( $V=I \cdot R$  wherein R is a definite resistance). As to claim 14, it appears that the portion of the conductor is a piece of resistance wire with a known specific resistance and a defined length. As to claim 15, it appears that the current draw could be detected or computed by a current sensor (200) of the load measuring device (10) and this current sensor (200) would be qualified as "computing unit". Furthermore, since the load measuring device (10) connected to the controller (201), it would have been obvious for one of ordinary skill in the art to consider that the computing unit of the load measuring device as a part of the motor control circuit. As to claim 4, it appears that

Whipple III also suggests that a measured current sensor (220) (as shown in figure # 1) is also used for measuring a current draw from of the load. As to claim 19, it appears that the portion of the conductor is a piece of resistance wire with a known specific resistance and a defined length. As to claim 20, it appears that the portion of the conductor is a bridge between a plug contact of the power line and a printed circuit board carrying the control circuit. Circuit. As to claim 21, the value of the resistance between 1 and 5mOhm would have been an obvious design choice since this resistance value depends on the type and the length of the conductor. As to claim 22, it appears that the current draw could be detected or computed by a current sensor (200) of the load measuring device (10) and this current sensor (200) would be qualified as “a processor”. Furthermore, since the load measuring device (10) connected to the controller (201), it would have been obvious for one of ordinary skill in the art to consider that the processor (200) of the load measuring device as a part of the motor control circuit.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bahel et al (pat # 5,630,325) disclose a heat pump motor optimization and sensor fault detection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

6. It is noted that a German reference cited on the PTO-1449 has not been considered since there is no English translation. In order for Examiner to consider that reference, Applicant is required to provide an English translation of that reference.

  
VINH P. NGUYEN  
PRIMARY EXAMINER  
ART UNIT 2858  
07/18/2001